



# UNITED STATES PATENT AND TRADEMARK OFFICE

54  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,502	07/03/2000	Tomoyasu Katsuyama	9281/3698	1658

757 7590 01/06/2005

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, IL 60610

EXAMINER
----------

LESPERANCE, JEAN E

ART UNIT	PAPER NUMBER
----------	--------------

2674

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 09/609,502	<b>Applicant(s)</b> KATSUYAMA ET AL.	
	<b>Examiner</b> Jean E Lesperance	<b>Art Unit</b> 2674	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All   b) ☐ Some \* c) ☒ None of:  
     1. ☒ Certified copies of the priority documents have been received.  
     2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-4 and 6-16 are presented for examination.
2. The amendment After Final filed 11/18/2004 is entered.
3. The allowable subject matter of claims 1-4, 10-14 and 16 is withdrawn and another Office Action is provided below.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-16 are rejected under 35 USC 103 (a) as being unpatentable over US Patent # 6,151,000 ("Ohtaka et al.").

As per claims 1, 6 and 10, Ohtaka et al. teach a display apparatus 630 that has three display areas 631, 632 and 633 of Fig.8 © corresponding to a screen capable of displaying an image area and a blank area; an A/D converter Fig.9 (302) corresponding to an A/D converter to convert an input analog image signal into digital image data; the parameter selector Fig.9 (305) for setting the scanning area and supplies to the control pulse generator (306) for controlling the scanning area where a scanning area can be calculated from signal format information corresponding to a black level setting mechanism to set a first black level of the digital image data by adjusting a lower-limit

Art Unit: 2674

reference voltage of the A/D converter and a blank data generator to generate blank data to form the blank area around the image display area, a second black level of the blank area being independent of the first black level of the digital image area (see figure 8c); a control pulse generator Fig.9 (306) corresponding to an image data combiner to combine the blank data and the digital image data; and a display apparatus 630 that has three display areas 631, 632 and 633 of Fig.8c corresponding to an output of the image data combiner being displayed on said screen. The prior art does not teach explicitly a first and a second black level of the digital image. However, the prior art teaches a display apparatus which has three different display areas with different display gradations. Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify a first and a second black level of the digital image to achieve a display apparatus, which has three different display areas with different display gradations because this would provide display apparatus having sufficient gradations or sufficient brightness.

As per claims 2, 7 and 11, Ohtaka et al. teach the parameter selector 305 can be composed of a microcomputer, a parameter related to a scanning area can be calculated from signal format information, outputted from input signal discriminator (304), where the selector parameter inherently includes a component like a variable resistor to calculate the scanning area from signal format information corresponding to said black level setting mechanism comprising a variable resistor.

As per claims 3, 8 and 12, Ohtaka et al. teach a static image is taken in a

Art Unit: 2674

window on the screen of a display device for controlling gradations by a time sharing driving method, sufficient luminance or sufficient gradations can be represented and a high resolution image can be provided (column 11, lines 58-62) corresponding to said black level setting mechanism comprising an illuminance sensor to detect the illuminance around a video camera that outputs said analog image signal.

As per claims 4, 9 and 13, Ohtaka et al. teach a horizontal electrodes and vertical electrodes are scanned for selectively illuminating said pixels by using a time sharing drive method in which one field period is divided into plural sub-fields weighted according to a sustaining period, wherein an effective display area is divided into plural areas, no scanning for selecting a light emitting pixel is executed in a non-display area, and the number of the above sub-fields is increased in an area in which display in multiple gradations is required in a display area to obtain sufficient gradation (column 4, lines 36-48) corresponding to wherein said black level setting mechanism outputs a lower-limit reference voltage corresponding to illuminance detected by said illuminance sensor.

As per claims 14, 15 and 16, Ohtaka et al. teach a display apparatus 630 that has three display areas 631, 632 and 633 of Fig.8 © where the different display areas are separated from each other by some line (see Fig.8c) corresponding to a blanking marker signal corresponding to a single pixel between the blank area and the image display area such that a white line is vertically displayed on the screen which separates the blank area and the image display area.

Art Unit: 2674

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office Whose telephone number is (703) 306-0377.

Jean Lesperance



Art Unit 2674

Date 12-30-2004



**HENRY N. TRAN  
PRIMARY EXAMINER**